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Structural Capital Efficiency and Financial Performance of Listed Oil and Gas Firms in Nigeria

Abiodun Popoola
Ahmadu Bello University, Zaria, Nigeria

Dorothy Aje Patrick Edem & Samuel Eniola Agbi
Nigerian Defence Academy, Kaduna, Nigeria

Abstract

The study examined the effect of structural capital efficiency on financial performance of listed oil and gas firms in Nigeria for the period 2006 to 2018. Nine firms were sampled purposively, and data were obtained from the audited annual reports of the firms for analytical purposes. The independent variable, structural capital (SC) was measured by internal capital efficiency (ICY) and external capital efficiency (ECY) while the dependent variable, financial performance, was measured by Return on Assets (ROA). Leverage (LEV) was used as control variable for the study. After several diagnostic tests, regression analysis was used for inference and test of hypothesis. The result of the regression analysis revealed that both ICY and ECY have positive and significant effect on ROA thus implying the prominence of these two variables in determining the financial performance of listed oil and gas firms in Nigeria. A recommendation of the study is that management of oil and gas firms should strengthen existing intangible structures such as systems, routines, procedures and customer relations to enhance their corporate performance.

Keywords: Structural Capital, Internal Capital, External Capital, Resource-Based theory, Leverage

JEL Classification: L25, L71

Paper Classification: Research Paper

Introduction

Financial performance is one of the foremost concerns of business firms. Among other things, the relative importance of this measure of management productivity is reflected in the extent to which the financial objectives of a firm have been accomplished which is determined mostly by the measurement of the financial results of operations. Monetizing the financial objective is hinged on the values presented in the financial statements of a firm particularly the statements that show income (i.e. profit and loss account), financial position (i.e. balance sheet), and the flow of funds. Of these three, the statement of income is recognized globally and used to express the financial

results or performance over a period usually over a period of one year. And in appraising the financial performance of corporate organizations, consideration is given specially to investments and utilisation of available assets, both tangible and intangible. The essence is to ascertain whether the firm's objectives have been realistically achieved during operations.

For much time in the past, attention has been majorly focused on studying the financial efficiency vis a vis tangible-assets. But of recent and in an increasing manner, authors and analysts are considering the intangible assets-financial performance relationship. This paradigm stems from the development of new forms of business undertakings which are mostly knowledge-based and thus produce high volumes of economic output. To Bailoa (2017), the knowledge-based focus has resulted in a transition from an economy that is based on tangible goods (i.e. raw material, labour and capital-intensive) to an economy largely based on intangible assets and concentrated in knowledge, centred on information, human capacities, know-how, customer-supplier relationship, brand loyalty, quality of products and services, marketing, among others. In other words, for physical and financial assets to be effectively utilised, intangible assets must be adequately harnessed (Rosita, Ghozali, Harto, Susanto & Zainuddin, 2020). Thus, intangible assets in a knowledge-based setting relate to intellectual capital which is often couched in the form of human competencies and structural capital. On its part, structural capital forms the intangible structures upon which human capital functions. Therefore, it becomes imperative for firms to establish and properly maintain their non-physical structures to improve competitive advantage and enhance financial performance.

The Nigerian economy has experienced series of transition since independence in 1960. Of all the sectors in the economy, the oil and gas sector has over time been a major player in this trend and has largely shouldered much of the industrialization and recurrent expenditure in the country as well as the development of other sectors. The importance of the sector to the Nigerian economy is such that it has become difficult for contemporary societal institutions in the country to function efficiently without oil and gas. Nigeria possesses the largest natural gas reserves in Africa and hopes of meeting the country infrastructure needs for its development rests on the proper harnessing of the gas potentials. The first gas project in Nigeria, the Nigeria liquefied natural gas (NLNG) facility on Bonny Island, has six liquefied natural gas (LNG) trains currently operational with a total annual capacity of 31billion cubic meters (bcm), and is a prominent supplier of LNG to European purchasers (Klynveld Peat Marwick Goerdeler Nigeria (KPMG), 2014).

Despite the achievements of the Nigerian oil and gas sector, firms in this sector still contend with several challenges especially those relating to human resources and management of other intangible assets. In the aspect of value creation, the Nigerian Government has endeavoured to include indigenes in the activities of the oil and gas industry through its local content initiative. However, this process has given rise to other issues. For instance, casualization of workers has been an issue of concern among these firms. Özkan (2017) noted that there are huge disparities in the working conditions between employees and precarious workers. Additionally, employees' safety requires adequate consideration in the oil and gas sector of Nigeria. Uzoho (2017) also reported cases of inadequate installation of new and functional safety gadgets for workers both in the upstream and downstream sector of the industry. These conditions make workers' efficiency in the sector to be under serious threat.

There is no gainsaying the fact that workers look constantly forward to assurance of safety so as to give optimum performance. Not properly addressing issues relating to the provision of an enabling environment for day to day rounds of activities would result in loss of confidence in

the system by the staff. And when employees perceive inequality and or emerging threats to life, their productivity is bound to decline. The spiral effect of this would ultimately result in decline in revenue and by extension decrease in financial performance or even outright losses.

Among the studies that have considered structural capital efficiency and financial performance of Nigerian firms are Ogbo, Ezeobi, and Ituma (2013), Okoye, Aroh and Egbunike (2015), Anyanwu, Ezu, Osadume, and Ananwude (2017), Kurfi, Udin and Bahamman (2017), Ofurum and Aliyu (2018) as well as Ewereoke (2018). Their areas of concern were production, pharmacy, banks, and listed industrial firms in Nigeria. The study should add to the literature in the area by focusing on the oil and gas sector in Nigeria. Aside this, it also differs from the above and other studies in terms of time, scope and variables of interest.

The hypotheses of this study are as follows:

H_{01}: Internal capital efficiency has no significant effect on financial performance of oil and gas firms in Nigeria.

H_{02}: External capital efficiency has no significant effect on financial performance of oil and gas firms in Nigeria.

It is hoped that the practical outcome of the study will be of relevance to analysts, investors, and the managers of firms in the oil and gas sector of the Nigerian economy. It should help them to understand and better appraise the investment of firms in structural capital in recent years and the impact of this investment on financial performance at firm-level as well as industry-level. Management experts should also benefit by a better appreciation of the nexus between human capital and achievement of financial objectives in business.

Review of Literature

Structural capital is one of the two constituents of intellectual capital (IC), the other being human capital. IC measures the sum of intangible value of a firm in a knowledge-based economy (Ogbo, Ezeobi, & Ituma, 2013). By the description given in Kleynhans and Sekhobela (2015), structural capital (SC) is the measure of intangible structures established by firms that enables human capital function effectively. Commensurate attention should be given to intangible structures (structural capital) rather than concentrating only on physical structures and equipment (Tarigan, Listijabudhi, Hatane, & Widjaja, 2019). This, going by the position of Xu and Wang (2019), is especially due to their important contribution in achieving firm's financial performance.

Structural Capital is, in turn, characterised by two major types of substructures namely, external and internal capital. External capital, otherwise known as relational or customer capital, refers to a firm's connection with external entities. Kim, Yoo, and Lee (2010) show that external capital (EC) is the knowledge embedded in organisation's marketing channels and customer relationships developed over time via its business operations. Distinctively, customer loyalty, order levels and market share form part of relational capital. EC entails all human and structural resources connected with relationships external to the firm, such as relationship with customers, suppliers and other stakeholders. This, by extension, includes perceptions about the firm, connections with customers, ties with suppliers, link with financial institutions, government, research and development, partners, etc. (Ali, 2015).

Veeramani and Chandrasekaran (2017) re-echo the argument in Oğraş' thesis that EC is an external element since its ownership is not completely transferred to the entity as it is with human capital. This makes it to revolve around external revenue of the firm. The relationship which a firm

develops over time with suppliers, customers, partners, competitors and governmental agencies which adds value to the firm is tantamount to relational or external intangible capital. This accords with the statement in El-Bannany (2012) that the usefulness of EC and its value-creation ability are derived from the positive relationship between the firm and external parties. Summing these together, it can be inferred that there are external intangible structures which stand as support for the human capital to thrive and function efficiently. Such intangible structures include customer loyalty, customer satisfaction, suppliers' confidence, and positive ties with financial institutions. All these have been found to enable the system to function properly hence the need to account for increased value creation as well as elevated competitive edge.

Internal capital, which is also known as organisational capital, refers to organisational capabilities of an entity. It includes organisational systems, policies, management philosophy, routines, culture, and networks designed to satisfy market requirements. Related to these are the combinations of explicit and implicit as well as formal and informal knowledge, which is an efficient way to improve organizational activities, (Ramezan, 2011). Beattie and Thomson (2007) offers the viewpoint that internal capital is the knowledge that stays within the firm at the end of the working day and that such comprises internal intangible infrastructures such as procedures and systems that increase proficiency. As if to reinforce this perspective, El-Bannany (2012) suggests that internal capital is knowledge built in the organisation's procedures, processes, culture, information system, database, networks and leadership. From this perspective, internal capital could be said to be the internal dynamics that drive organizational progress.

A firm's internal capital can be in the form of innovation capital and process capital. Innovation capital refers to new ideas created by employees of an organisation which enable them to translate the needs of customers into valuable products (Lim, Chan & Dallimore, 2010). In this class are intellectual property such as patents, trademarks and copyrights, and other intangible assets (Edvinsson & Malone, 1997). On its part, process capital refers to the implementation of techniques, procedures, and programs that enhance the provision of goods and services, (Hasan, Mohammad, & Alam, 2017). Process capital is that element of structural capital that upholds corporate culture, process management, information systems, networking, standards and systems.

Basically, there are several ways by which intellectual capital can be holistically measured. Among these include the use of Balanced Score Card (BSC), Skandia's Navigator, Torbin's-Q and Value Added Intellectual Coefficient (VAIC). This study adopts the VAIC model which was propounded by Pulic (2008). Although, Joshi, Cahill, Sidhu and Kansal (2013) argued against the consistency of VAIC in the sense that it does not accommodate Research and Development, and Intellectual Property, several other extant studies including Cheng, Cheng and Hwang (2005), Nimtrakoon (2015), Ozkan, Cakan, and Kayacan (2016), Ogbodo, Amahalu and Abiahu (2017), Khan (2018), and Inyada (2018) have provided evidence as regards VAIC's viability and reliability. These scholars are of the opinion that despite its shortcomings, VAIC's benefits far outweighs its challenges. Summarily, Nimtrakoon (2015) affirms that VAIC is an objective, standardized, consistent, and verifiable analytical tool with ease of computation and comprehension, since audited financial statements form the basis of the data.

The VAIC model consists of three basic components namely: Human Capital Efficiency (HCE), Structural Capital Efficiency (SCE) and Capital Employed Efficiency (CEE), (Pulic, 2008). This study, however, focuses on SCE which in this case was further decomposed into Internal Capital Efficiency (ICY) and External Capital Efficiency (ECY). SCE is value created by structural capital input in a firm and is expressed as a ratio of structural capital to value added (Anyanwu, Ezu, Osadume, & Ananwude, 2017). While internal capital efficiency is connected with

intangible organisational structures that enable human capital operate efficiently (Ramezan, 2011; Suherman, 2017), external capital efficiency, on the other hand, is engrained in a firm's intangible structures stemming from the firm's relationship with other entities. Mostly, these relationships were developed based on past performance of the human capital (El-Bannany, 2012; Hidaya & Adityawarman, 2017). These intangible resources could be effectively utilised to attain sustainable financial performance.

Financial performance is a measure of the efficient use of a firm's invested capital for satisfactory revenue generation. Ofurum and Aliyu (2018) reasoned that financial performance is limited analyses based on accounting information because FP can easily be obtained and compared. Information for assessing financial performance can be ascertained from a firm's financial statements and other reports. Indicators for determining the financial performance of a firm includes profitability ratios, from which Return on Assets (ROA) was chosen for the study. ROA measures efficient utilisation of firm's available assets in generating profits. It indicates, in a clear manner, a firm's profitability in relation to its total assets. In this wise, ROA is serving as an appraisal of the competence of management in generating profits from the assets of the firm, (Nedelcu, Banacu, & Frasineanu, 2014).

The anchor theory for the study is Resource-Based Theory (RBT). RBT explains the fundamental issues embedded in the study in terms of feasible investment and proficient resource utilisation to achieve desired result. The fundamental focus of RBT is that a firm is characterized by a combination of resources that are peculiar to its existence and represents basis for sustainable competitive advantage. To clarify this, Edom, Inah, and Adanma (2015) categorised the resources of an organisation into physical and human assets. While plants, technological equipment, land and buildings are part of the physical assets, human resources include employees' experience, employees' knowledge, skills, and social relations. Proponents of RBT suggest that competitive advantage and better financial performance can be achieved through efficient use of intangible assets (Lazzolino & Laise, 2013).

There are existing studies relating to structural capital efficiency and financial performance. Apparently, these studies did not examine SCE in isolation but holistically as a component of VAIC. For instance, Rosita, Ghozali, Harto, Susanto, and Zainuddin (2020) focused on the banking sector in Indonesia from 2012-2016 and found out that SCE has significant effect on ROA. Also, Khalique, Ramayah, Shah, and Iqbal (2019) researched on the banking sector of Sialkot Pakistan with 210 respondents, structural capital was found to be insignificant in determining the financial performance of this case.

However, in connection with the perspective of the study where SCE is decomposed into internal and external capital, a few studies provide some evidence relating to the subject. Some of these studies include the works of Andreeva and Garanina (2017) that centred on 240 Russian manufacturing firms for the year 2015. The study found out that relational capital (external capital) did not influence financial performance for that period. Mbugua and Rotich (2014) focused on 10 Kenyan banks from 2009 to 2013; the study revealed that relational capital had statistically significant impact on ROA. Anuonye (2016) focused on 18 Nigerian insurance firms using primary data from 150 respondents; the study discovered that relational capital had no significant effect on financial performance.

Methodology

This study was based on quantitative survey using ex-post factor research design. Secondary data was obtained from published audited annual reports of listed oil and gas firms in Nigeria.

From the twelve oil and gas firms that are listed on the floor of the Nigerian Stock Exchange and form the population, nine firms were selected purposively on the basis of availability and accessibility of relevant data for the 13-year period of 2006 to 2018. The firms that form the sample are Conoil PLC, Eterna PLC, Japaul Oil & Maritime Services PLC, Oando PLC, Forte Oil PLC, MRS Oil (Plc), 11 Plc, Total Nigeria Plc and Capital Oil Plc.

Variables and their evaluation

The regression model for the study is as follows:

$$ROA_{i,t} = \beta_0 + \beta_1 ICY_{i,t} + \beta_2 ECY_{i,t} + \beta_3 LEV_{i,t} + \varepsilon_{i,t}$$

Where:

$ROA_{i,t}$ = Return on assets, a measure of the financial performance (proxy by profitability) of individual firms at time t. ROA is measured by profit before tax divided by Total Assets (Baye & Douanla, 2014)

$ICY_{i,t}$= Internal Capital Efficiency, an indicator of internal capital performance determined by ratio of internal capital to value added of individual firms at time t (Suherman, 2017).

$ECY_{i,t}$= External Capital Efficiency, an indicator of external capital performance represented by the ratio of external capital to value added of individual firms at time t (Hidaya & Adityawarman, 2017).

$LEV_{i,t}$ = Leverage is an indication of the risk profile of the firms represented by ratio of total debt to total assets of individual firms at time t (Smriti & Das, 2017).

β_0 = Constant term (intercept)

β_1 toβ_3 = Coefficients to be estimated

$\varepsilon_{i,t}$ = Error term associated with individual firms at time t.

i= sampled oil and gas firms (9)

t = period of analysis (13 years)

Results and Discussions

In this section, tests performed on the secondary data are presented. These include descriptive statistics, diagnostic tests and regression analysis. Table 1 presents a description of the data properties of the study. There is a total of 117 observations from the 9 sampled firms for the period of 13 years which makes the distribution strongly balanced. In other words, no data was missing for all the firms within the coverage period. The descriptive statistics of the variables is as in Table 1.

Table 1: Summary of Descriptive Statistics

Variable	Obs	Mean	Std. Dev.	Min	Max	Skewness	Kurtosis
ROA	117	0.027	0.131	-0.713	0.441	-2.036	12.801
ICY	117	0.707	0.383	-1.270	1.634	-1.820	10.143
ECY	117	0.042	0.164	-0.262	1.333	5.326	39.249
LEV	117	0.694	0.373	0.012	2.383	1.466	7.673

Source- STATA 14 output

Table 1 shows the statistics of the variables, the skewness of the distribution of one of the variables (ECY), conforms to the cut-off point of ±3 with values of 5.326. As for kurtosis, only LEV fell below the threshold of ±10 with value of 7.673. These are indication that not all the residual of the data distribution meets the criteria of normality (Kline, 2005).

ROA shows a mean of 0.027, implying that sampled firms made approximately 3% profit from their investments in assets during the period of analysis. Moreover, the level of data distribution for ROA was dispersed from mean up to 13% based on the value of standard deviation. What accounts for this rate of volatility is the variation in the minimum and maximum mean with values of -0.713 and 0.441 respectively. This suggests that one of the sampled firms incurred a loss of 71% on total assets whereas, a firm made up to 44% profit during the coverage period. ICY shows a mean, minimum mean and maximum mean of 0.707, -0.270 and 1.634. This suggests that on the average the increased value in proportion to investment in internal intangible structures by sampled firm is 0.71, whereas, the maximum value added is 1.634 and the minimum was a diminished value of 0.270, represented by the negative figure. Moreover, the deviation from mean was 0.383.

Furthermore, ECY shows a mean value of 0.042 indicating the additional value derived from the investment in external non-physical structures of sampled firms on the average. A maximum value of 1.333 was also derived from these external structures by a firm during this coverage period whereas, a firm experienced a reduction in value added to the minimum of -0.262. LEV presents a mean, minimum mean, maximum mean and standard deviation of 0.693, 0.012, 2.383 and 0.373 respectively. This indicates that on the average, the sampled firms used 69% of debt to finance their assets. Maximally, 238% was used for financing assets while 1% was used on the minimum. The variation of the data distribution from the mean is 0.373 as evidenced by the standard deviation.

Table 2 presents Shapiro Wilk W test for normality.

Table 2: Test for Normality

Variable	Obs	W	V	Z	Prob>z
ROA	117	0.70058	28.203	7.472	0.00000
ICY	117	0.77179	21.495	6.864	0.00000
ECY	117	0.51044	46.112	8.572	0.00000
LEV	117	0.86335	12.871	5.716	0.00000

Source- STATA 14 output

The hypothesis for the test for normality as in Table 2 is that residuals are normally distributed; however, as observed from the result in Table 2, the hypothesis is rejected for all the variables since the probability values (p-values) of all the variables are significant at 1%. This therefore confirms the issue of non-normality earlier identified with the skewness and Kurtosis of the data distribution. The correlation matrix of the variables is as in Table 3 .

Table 3: Correlation matrix

	ROA	ICY	ECY	LEV
ROA	1.0000			
ICY	0.2643	1.0000		
	0.0040			
ECY	-0.0023	-0.2469	1.0000	
	0.9804	0.0073		
LEV	0.4460	0.2344	-0.0760	1.0000
	0.0000	0.0110	0.4152	

Source- STATA 14 output

The bivariate correlation matrix in Table 3 shows that ROA and ICY have positive and significant relationship, meaning that an increase in ICY should result in an increase in ROA. On the other hand, ROA and ECY have negative and insignificant relationship, portraying that an increase in ECY should result in a decrease in ROA. LEV shows a positive and significant relationship with ROA. The independent variables and control variable (ICY, ECY, and LEV) show values less than 0.8 which indicates that multicollinearity is not a problem in this case (Hair, Black, Babin, Anderson & Tathan, 2010).

Table 4 Shows a summary of the diagnostic tests performed in the study.

Table 4: Summary of Post Estimation Tests

Tests	**Results**		
Multicollinearity	**Variable**	**VIF**	**1/VIF**
	ICY	1.120	0.892
	ECY	1.070	0.939
	LEV	1.060	0.945
	Mean VIF	1.080	
Heteroscedasticity	**Chi²**		**Prob.**
	74.970		0.000
Hausman Specification	0.650		0.885
Lagrangian Multiplier	59.430		0.000

Source- STATA 14 output

From Table 4 it can be seen, the mean VIF is 1.080 and the highest VIF from the individual observation is 1.120 (ICY) which is less than the threshold of 4. Besides, the tolerance level (that is, 1/VIF) for each of the variables is less than 1.0. This is a confirmation of the suggestion of absence of multicollinearity among the variables as earlier identified by correlation matrix in Table 3.

The test for heteroscedasticity shows a chi square value of 74.970 and a p-value of 0.000 which is significant at 1%, indicating that the data residuals are heteroscedastic, since the assumption is basically homoscedasticity of residuals. Hausman Specification test was performed to determine the most suitable estimation between fixed and random effect regression. The result shows a low chi square(0.650) and an insignificant p- value (0.885) suggesting the adoption of random effect estimation for analysis.

Furthermore, to determine the selection between pooled OLS and random effect, the Lagrangian Multiplier test was performed, the result of this test presents a chi^2 of 59.430 and a p-value of 0.000 indicating the selection of random effect estimation for analysis. Therefore, the study adopts the random effect estimation for analysis and inference. However, due to identified no-normality and heteroscedasticity of data distribution identified by earlier test, this study used robust random effect regression to improve the standard errors and fit the model.

Table 5 is the summary of the output of the regression analysis.

Table 5: Summary of Regression Result

ROA	Coef.	Robust Std. Err.	Z	Prob.
ICY	0.055	0.013	4.270	0.000
ECY	0.045	0.021	2.180	0.029
LEV	0.129	0.038	3.430	0.001
CONS	-0.041	0.023	-1.780	0.075
R-squared	0.231			
Adj R-squared	0.211			
Prob> F	0.000			

Source- STATA 14 output

As observed from the Table 5, the R-squared value is 0.231. This indicates that ICY, ECY and LEV jointly explained 23% of the properties of the dependent variable ROA. Invariably, 77% of these attributes can be explained by other elements not captured by the study. Moreover, the F-statistics has p-value of 0.000. The implication of this p-value is the general fitness of the model for precise inference.

Turning to the specifics of the variables from Table 5, ICY has coefficient value of 0.055 and a p-value of 0.000 which is significant at 1%. This implies that, by the regression analysis done for the study, ICY has significant positive effect on ROA. The study, therefore, infers that internal capital efficiency is very vital in determining the financial performance of listed oil and gas firms in Nigeria. The implication of this finding is that, for everyone unit of investment in internal capital, the financial performance in terms of profitability of oil and gas firms increases by 0.055 value. By this, the first hypothesis of the study which states that ICY has no significant effect on financial performance is rejected.

The coefficient of ECY is 0.045 with p-value of 0.029 which is significant at 5%. This provides evidence that ECY has positive significant effect on financial performance of listed oil and gas firms in Nigeria. This finding is contrary to H_{02} of the study which states that external capital efficiency has no significant effect on financial performance of listed oil and gas firms in Nigeria.

Based on this finding, the study, therefore, rejects the second hypothesis with the inference that external capital efficiency is a crucial factor in determining the financial performance of listed oil and gas firms in Nigeria. Going forward, by and large, a unit increase in external capital efficiency by oil and gas firms, when all other factors are held constant, would result in 0.045 (that is $4^{1}/_{2}$%) increase in their financial performance.

Internal Capital Efficiency (ICY) and External Capital Efficiency (ECY) both have positive and significant effect on ROA. The finding on external capital is consistent with that of Mbugua and Rotich (2014) and Andreeva and Garanina (2017) but contrary to the findings of Anuonye (2016). LEV shows a coefficient of 0.129 and a p-value of 0.001 which is significant at 1%. This indicates that LEV has positive and significant effect on financial performance of listed oil and gas firms in Nigeria.

To this end, the findings of the study uphold the resource-based theory (RBT). This is to say that, for a firm to achieve optimum financial performance and enhance its competitive advantage, it must be able to identify and optimally harness all the resources at its disposal. Internal capital and external capital are among the viable resources that can boost financial performance.

Conclusion and Recommendations

The study examined the effect of structural capital efficiency (SCE) on financial performance of listed oil and gas firms in Nigeria from 2006 to 2018. In this case, SCE was decomposed into internal capital efficiency (ICY) and external capital efficiency (ECY), while the dependent variable, financial performance was measured by Return on Assets (ROA) which represents firm's profitability, and leverage (LEV) was used as control variable. The study revealed that both ICY and ECY are very essential in determining the financial performance of listed oil and gas firms in Nigeria.

The study likewise provides sufficient evidence that points to the fact that external capital is very paramount in enhancing profitability of oil and gas firms as indicated by their return on assets. External intangible structures in terms of firm's relationship with other relevant entities need to be built and maintained to enable human capital function effectively. As it stands, these relationships enhance customer loyalty, bankers' confidence and creditors' assurance of the firm's capability for prompt payment. Mostly, these relationships could be developed overtime, based on the past performance and commitment of the human capital. To achieve increased sales, attain stress-free loan from bank and collect goods from creditors in good faith, it is of utmost importance to strengthen these relationships, because these are the elements that keep the firm running.

Establishing and maintaining proper relationship with other entities still boils down to managing human capital. This entails creating relational awareness in the employees through adequate training in the aspect of customer relation and proper management of financial and material resources available for firm use. Employees should be exposed to training programs, workshops and seminars that will enhance their relational and soft skills. This is important because, no matter the amount of money that is used on human capital, goals and objectives of the organisation would still not be achieved if a firm is unable to build and maintain vital relationships with other entities due to employees not being adequately aware of their roles. Thus, basically, external intangible structures are quintessential to the existence, growth, and development of oil and gas firms in Nigeria.

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Author's Profile

Abiodun Popoola is a Senior Lecturer in the Department of Economics, ABU Business School, Ahmadu Bello University, Zaria, Nigeria. He had a career in commercial banking before joining the academia almost two decades ago. Having had Postgraduate Trainings in the fields of Accounting and Economics, he is a Member of the relevant professional bodies in Nigeria. He is practically involved in Rural Finance and Development Management.

Dorothy Aje Patrick Edem is an Entrepreneur and a Research Student at the Department of Accounting, Faculty of Management Sciences, Nigerian Defence Academy, Kaduna, Nigeria.

Samuel Eniola Agbi is a Senior Lecturer in the Department of Accounting, Faculty of Management Sciences, Nigerian Defence Academy, Kaduna, Nigeria. He has a working experience of over 20 years as a Member of the academia in Canada and Nigeria. He is particularly skilled in the areas of Tax Planning and Financial Engineering.